index

NUMBERS

8-bit images. *See also* JPEG format
  converting to 16-bit images, 114–115, 137
  overview, 12
  remapping the white point for, 113–114
1-bit line art, printing, 366
16-bit images
  converting 8-bit images to, 114–115, 137
  overview, 12
12-bit images, 12

A

Abbott, Berenice (photographer), 284
Absolute Colorimetric color conversion, 37, 38
ACE (Adobe Color Engine), 36–37
ACR-Calibrator script, 259–261
Actions
  palette group for, creating, 7
  playing, 7–8
  for resizing images, creating, 6–7
Adams, Ansel (photographer), 4, 340
adjustment layers. *See also* blend modes
  for converting color to grayscale, 288–295
  for Hue/Saturation changes, 162
  for increasing contrast, 103, 105
  layer masks, 25, 291
  for Levels dialog box, 244
  for overexposure color correction, 151, 153, 154
  overview, 24–25
  Photo Filter, 318, 319
  for selection masks, 162
  for white balance correction, 147, 244
Adobe Bridge
  auto launching from Photoshop, 75–76
  batch processing Camera Raw settings, 84–85
  color settings adjustments in, 19
  converting Camera Raw to DNG using, 53–55
  setting Camera Raw preferences, 58–60
  setting preferences for, 55–58
  tooltips, 55
Adobe Camera Raw For Digital Photographers Only (Sheppard), 46
Adobe Color Engine (ACE), 36–37
Adobe Gamma calibration tool, 31–32
Adobe Open dialog box, 72–74
Adobe RGB (1998) color working profile, 17–18
aerial photography
  basic edits, 177–179
  colorcasts common to, 177–178
  haze and, 176, 179
  problems common to other shots, 176
  screen view and, 180
  sharpening, 179–182
alpha channel
  creating with Calculations dialog box, 193
  for high-key images, 302–305
  Lens Blur filter with, 330, 334
antialiasing filter, moiré patterns from, 263
Apple CMM color engine, 37
Apple Color Sync color engine, 37
Apply Image command
  multiple duplicate layers technique with, 210–212
  Screen mode with, 210–211, 214, 322
Arbus, Diane (photographer), 140
archiving files, format for, 52
artifacts, eliminating, 135–136
Assign Profile dialog box, 20–21
assuming a profile, 36, 39–40
Auto Color Corrections dialog box, 98

B

batch processing, 84–85
Bicubic resampling mode, 8
Bicubic Sharper resampling mode, 9
Bicubic Smoother resampling mode, 9
Bilinear resampling mode, 8
bit depth. *See also specific bit depths*
  Camera Raw versus JPEG and, 48–49
  for editing Camera Raw files, 60
  overview, 12
  Shadow/Highlight command and, 116
black point. *See* white and black points
black-and-white photos. *See also* converting color to grayscale
  color mode for printing, 314
  colorizing, 306–313
  high-key darkroom techniques for, 302–305
  negatives, copying, 271–273
  1-bit line art, 366
  printing, 314, 364–366, 376
  shooting infrared photography, 297–298, 314
  simulating an infrared shot, 298–301

COPYRIGHTED MATERIAL

blend modes. *See also specific modes*
for eliminating artifacts, 136
for improving dynamic range, 13–14
Mason Pat Pending Mixed Mode Image Save, 210–212
overview, 24–25
Bresson-Cartier, Henri (photographer), 28
Bridge. *See* Adobe Bridge
brightness adjustments. *See also* dynamic range
basic curve shapes for, 107–113
in Camera Raw dialog box, 93–96
multiple duplicate layers technique for, 210–212
Screen mode for, 214, 322
Shadow/Highlight command limitations for, 117
for uneven exposure, 230, 232
White Point slider for, 218

C

cache for Camera Raw files, 59
Calculations dialog box, 193
calibrating Camera Raw color, 76–83
calibrating monitors
for color profiles, 16
color viewing and, 4
embedding color profiles and, 26
hardware devices for, 30
Macintosh displays, 31
viewing compensation layers and, 357–360
Windows displays, 31–32
Calumet Photographic Web site, 236
camera movement, decreasing, 206
Camera Raw database files, 59, 88
Camera Raw dialog box
in Adobe Bridge and Photoshop, 87
for black-and-white negative photocopies, 271–273
brightness adjustments in, 93–96
for color negative photocopies, 275–279
Curves pane, 272–273, 275
for duped slides, 268–270
histogram, 61–62, 66
processing images in, 70–72
turning off auto settings, 137
turning off sharpening in, 72, 87, 122
use before opening images in Photoshop, 70–72
white and black points in, 97
Camera Raw format
Adobe Bridge with, 55–72
in Adobe Open dialog box, 72–74
applying last settings to selected images, 86
bit depth and, 12
calibrations for copy work, 259–262
changing settings for, 85–86
clearing settings for an image, 72
color calibration, 76–83
conversion tool, 48
defined, 46
digital cameras and, 46
DNG standard for, 52–55, 87
further information, 46
histogram for, 61–69
JPEG versus, 48–52
opening in Photoshop CS2, 72–76
overview, 46–48
removing settings, 85–86
resolution and, 6
setting preferences for, 58–60
settings for batch processing, 84–85
speeding work with, 50, 52
Camera Raw Preferences dialog box, 58–60
cameras. *See* digital cameras
Cameron, Julia Margaret (photographer), 46
Canvas Size dialog box, 369
Capa, Robert (photographer), 250
Channel Mixer dialog box, 227, 288–292
chromatic aberrations, correcting, 328–329
chromatic noise, 222. *See also* noise
Chromoholics Web site, 259
clipping
in Camera Raw histogram, 61, 93
to decrease noise, 219–220
Shadow/Highlight command for adjusting, 121
by Variations command, 145
CMYK color mode
assuming a profile, 36, 39–40
CMYK inks and, 376
color gamut and, 10–11, 26, 43
embedding output profiles and, 36
offset press printing and, 367
overview, 10–11
printers and, 26
soft-proofing and, 40–41
Color Balance command, 144
color channels
for Camera Raw format, 64–66
in Curves dialog box, 145
duplicating to create a working channel, 131
Enhance Per Channel Contrast option, 219
gray levels in, 12
in Grayscale color mode, 11
in Lab color mode, 11
moiré pattern correction using, 264–266
in RGB color mode, 10, 64–66
white balance correction using, 147–148
Color Checker chart (GretagMacbeth), 259
color crossover correction, 360–364
color engines, 36–37
color gamut
bit depth and, 12
RGB versus CMYK and, 10–11, 26, 43
soft-proofing for out-of-gamut colors, 40
sRGB color working profile and, 18
color matching, photocopying art prints and, 254

color modes. *See also specific modes*
CMYK inks and, 376
overview, 10–12
preparing files for press, 367
printers and, 26
for printing black-and-white photos, 314
color negatives
with color balance problems, capturing, 280
editing photocopies, close-up of child, 278–279
editing photocopies, hot air balloon, 275–278
overview, 274–275
color profiles. *See also* calibrating monitors; *specific kinds*
camera, 18
Camera Raw versus JPEG and, 50
color viewing and, 4, 16
color working, 17–22, 26
defined, 16
monitor, 16
output (for printing equipment), 18–19, 33–41, 42, 292–296, 352–354
for papers, 314, 370, 376
Color Range command
adding to selections, 157–158
creating selection masks with, 157–159
Fuzziness setting for Hide Edges mask, 195–196
for isolating highlights and shadows, 245, 320
other selection tools versus, 156, 172
selecting sky area with, 155
color rendering index (CRI) of lighting, 28
Color Replacement tool, 227–228
Color Settings dialog box, 39
color working profiles
Adobe RGB (1998), 17–18
converting from another workspace, 21–22
embedding in images, 20–21, 26
overview, 17
sRGB, 18
colorcasts
with aerial photography, 177–178
defined, 140
exposure problems leading to, 140
from fluorescent lighting, correcting, 233–237
gradient picker for flesh tones, 199–205
identifying, 140–143, 146–147, 172
overexposure, 140, 150–155
in parts of an image, 140
Photoshop tools for correcting, 141–147
primary color basics, 141
selection masks for correcting, 156–165
slide duping and, 269–270
underexposure, 140, 149–150, 151, 244
white balance, 147–148, 244
colorizing black-and-white photos
combining tints and RGB color, 308–313
creating a sepia tone, 306–308
compression, saving files and, 7
contrast
adjustment layer for, 103–105
aerial photography settings, 178–179
basic curve shapes for, 108–110, 111–113
for color negative photocopies, adjusting, 277
correction mask for copy lighting, 256–258
Enhance Per Channel Contrast option, 219
increasing with Curves, 100–101, 104–105, 162
Luminosity blend mode for increasing, 104–105
noise from big enhancements, 176
setting white and black points for, 97–99
Shadow/Highlight command for adjusting, 121
uneven exposure and, 230, 232
Convert to Profile dialog box, 21, 33–34, 36–38, 353
converting color to grayscale
destructive methods, 284, 285
examining channels before, 284
fine-art method, 292–296
Hue/Saturation and Channel Mixer method, 288–290
as part of another process, 284–285
for selected areas, 290–292
simple nondestructive method, 287
copy stand for photocopying, 251
CRI (color rendering index) of lighting, 28
Cunningham, Imogen (photographer), 316
Curves dialog box
adjustment layer with, 103–105, 147, 151
advantages over Levels dialog box, 99–100
for aerial photography, 179
basic curves, 100–101, 107–110
as best tool for color correction, 145, 172
color channels in, 145, 153
for color crossover correction, 363–364
for combining tints and RGB color, 310–313
converting color to grayscale and, 294–295
for correction mask for copy lighting, 257–258
for darkening, 324
for flat overcast images, 238–239
for flesh tones, 168
gray Eyedropper tool in, 201
for high-key images, 303–304
Input and Output text boxes, 101
for overexposure color correction, 151–155
overview, 23–24
Photo Filters versus, 316, 317, 338
resizing, 100
with selection mask, 162, 163, 164–165
for sepia tone images, 307
setting up for use with this book, 23–24
for underexposure color correction, 149–150, 151
viewing compensation layers and, 358
white and black points in, 100
for white balance correction, 147–148
Customize Proof Condition dialog box, 354–355

D

depth of field, adding with Lens Blur filter, 333–336
detail
  in Camera Raw dialog box, 72
  Camera Raw file preferences for, 60
  Camera Raw versus JPEG and, 49
developer profiles, 19, 33, 42
digital cameras
  antialiasing filter, moiré patterns from, 263
  Camera Raw format and, 46
  color profiles, 18
  determining image sizes from, 341–343
  DSLR, histogram display, 68
  DSLR, manual exposure controls, 228–229
  DSLR, near-infrared sensitivity of, 297
  dynamic range and cost of, 13
  filters, 236–237, 263, 280, 316
  lens aberrations and, 338
  for photocopying, scanners versus, 250, 268, 281
  resolution, printing and, 340–341
  16-bit images not produced by, 26
Digital Negative (DNG) format, 52–55, 87
discount photo centers, 371–372
dot gain, 184–185
downsampling images, 8–9, 241–243, 265
Dry Creek Photo
  Custom ICC Profile page, 34
  custom profiles from, 42
  ICC Profile Converter, 35
  Ole No Moire file, 200
Dust and Scratches filter, 264
dye based inks, 370
dynamic range
  improving by adding more data, 13–14, 322
  improving for captured images, 14–16
  overview, 13
  warning for Merge to HDR command, 26

E

earth tones. *See* memory colors
8-bit images. *See also* JPEG format
  converting to 16-bit images, 114–115, 137
  overview, 12
  remapping the white point for, 113–114
Eisenstaedt, Alfred (photographer), 176
Embed Profile Mismatch dialog box, 22
embedding color profiles in images
  color working profiles, 20–21, 26
  output profiles, 36–38
EPS Options dialog box, 185, 186
exposure
  colorcast problems from, 140
  controlling manually, 228–229
  overexposure, 140, 150–155
  strong contrast in lighting and, 228
  Threshold dialog box for analyzing, 150–151, 229–230
  underexposure, 140, 149–150, 151, 217–221
  uneven, correcting, 228–233
Eye-One Display 2 profiling tool (GretagMacbeth), 30
Eye-One Photo system (GretagMacbeth), 33
Eye-One Proof system (GretagMacbeth), 33

F

Fade command, 220, 223
film duping
  black-and-white negatives, 271–273
  color negatives, 274–280
filters (camera)
  antialiasing, moiré patterns from, 263
  for color negative photocopies, 280
  for fluorescent lighting, 236–237
  Photoshop filters versus, 316
filters (Photoshop). *See specific filters*
Find Edges filter, 132
flash shots
  beyond-repair photos, working with, 208–212
  fluorescent lighting and, 236–237
  insufficient flash, 212–217
  red-eye correction, 226–228
flat art copying. *See* print copying
flattening layers, 295
flesh tones. *See also* memory colors; portraiture
  in color negative photocopies, 279
  determining values for, 173
  enhancing for portraits, 187–198
  gradient picker for, 199–205
  Hue/Saturation dialog box for correcting, 169–171, 322–323
  pleasing, creating, 166–171
  preferences versus reality, 166
  saving files as references for, 200
fluorescent lighting
  colorcasts from, 140, 233–234
  correcting colorcast problems, 234–237
  filters for, 236–237
  with flash, 236–237
focal point, changing with Lens Blur filter, 333–336
full-spectrum lighting, 28

G

gamut. *See* color gamut
Gaussian Blur filter
  for Hide Edges mask, 193, 194
  for high-key images, 304
  moiré pattern correction using, 264, 265
  sharpening method using, 133
  for softening facial skin using a mask, 197
Genuine Fractals Print Pro (onOne Software), 9, 182
gradient picker for flesh tones, 200–205

Grayscale color mode, 11–12. *See also* converting color to grayscale
Grayscale command, 284, 285, 291, 296
grayscale gradient for color crossover correction, 360–361
GretagMacbeth
  Color Checker chart, 259
  Eye-One Display 2 profiling tool, 30
  Eye-One Photo system, 33
  Eye-One Proof system, 33

H

halftone frequency
  continuous-tone devices and, 185
  custom examples, 186, 187
  dot gain and, 184
  dot shape for, 185
  moiré patterns and, 262–263
  preparing files for press, 366–367
  prepress problems and, 206
  setting, 185
haloing, 50, 241
haze, correcting for, 179
Hide Edges mask, 192–197
High Pass filter, 135
high-key images, 302–305
highlights and shadows. *See also* Shadow/Highlight command
  blown-out, adjustments for, 245
  Camera Raw versus JPEG and, 49
  clipping of, 61, 93, 121
  isolating, 245, 320
  overcast lighting and, 238–239
  Photo Filters for color correction and, 317
  shadow recovery feature, 214–215
  uneven exposure correction, 230, 232
histogram
  for black-and-white conversion, 296
  brightening images with White Point slider, 218
  in Camera Raw window, 61–62, 66
  channels in, 64–66
  clipping in, 61, 93
  colors in, 61
  deciding on tonal adjustments using, 105–107
  DSLR cameras and, 68
  8-bit images in, 113
  importance of, 61
  in Levels dialog box, 63–69
  RGB, 64–69
  tonal values in, 93
Hue/Saturation dialog box
  adjustment layer for, 162
  converting color to grayscale using, 287–290, 294
  fixing saturation errors, 153–154
  for flesh tones, 169–171, 322–323
  for Hide Edges mask, 195
  overview, 24, 25
  Photo Filters versus, 316, 338
  for photos taken with insufficient flash, 215
  for postcard look, 220–221
  predicting hue change, 215
  with selection mask, 162, 163–164, 165

I

ICC Profile Converter (Dry Creek Photo), 35
Image Size dialog box, 114–115, 341–343
indoor lighting. *See also* flash shots
  colorcasts from, 140, 159
  fluorescent, 140, 233–237
  incandescent, 140, 159
  makeshift copy stand for photocopying, 251
  underexposure, correcting, 217–221
infrared photography
  shooting, 297–298, 314
  simulating, 298–301
inkjet printers
  automatic profile selection for, 345–349, 354
  custom profiles for, 352–354
  magenta bias with Epson printers, 351–352
  maintenance, 375
  Photoshop Color Engine for, 350–351, 354
  Print dialog box settings, 347–349
  Print Preview dialog box settings, 346–347
inks for printing, 370, 376
installing output profiles, 33–34
Internet resources
  Camera Raw calibration utility, 259
  CRT monitors, 30
  Dry Creek Photo, 34, 35, 42
  filters for fluorescent lighting, 236
  full-spectrum lighting, 28
  Genuine Fractals Print Pro, 9
  GretagMacbeth site, 30, 33, 259
  Ole No Moire file, 200
  Opteka slide-copying unit, 281
  Pixelgenius Photokit Sharpener, 122
  QuadTone RIP, 365
  service providers, 372–374
inverting images, 132
ISO speed, Unsharp Mask filter and, 125, 126

J

JPEG format
  Camera Raw format versus, 48–52
  cameras saving images in, 6
  converting images to 16-bit files, 114–115
  remapping the white point for images, 113–114
  resaving files in, avoiding, 7
  tonal adjustments for images, 113–115

K

Kelvin rating of lighting, 28

L

Lab color mode
conversion to grayscale using Lightness channel, 285
overview, 11
values for flesh tone gradient picker, 201–202
Lange, Dorothea (photographer), 208
layer masks, 25, 291
lens aberrations, 338
Lens Blur filter
limitations of, 330
overview, 330–333
planes of focus, 334–335
sharpening images after using, 338
using, 333–337
Lens Correction filter, 328–329
lens effects. *See also specific filters*
Lens Blur filter for, 330–337, 338
Lens Correction filter for, 328–329
overview, 316
Photo Filters for, 316–327, 338
Levels dialog box
for aerial photography, 177–178
for black-and-white negative photocopies, 273
brightening whites using, 216
Camera Raw histogram in, 63–69
changing Auto Levels defaults, 98
channel histograms in, 64–66
checking tonal information available, 213–214
for color correction, 144
Curves dialog box versus, 99–100
for flesh tones, 168–169
limitations of, 137
overview, 22–23
RGB histogram in, 64–69
rule of thumb for, 244
setting white and black points in, 97–99
16-bit image in, 12
spreading blacks for Hide Edges mask, 194–195
lighting (photographic). *See also* exposure; flash shots; white balance
Camera Raw format and, 46–47
Camera Raw versus JPEG and, 49, 50–51
cloudy days, 237–239
for color negative photocopies, 280
copy, correction mask for, 255–258
copy stand for photocopying, 251
for flat art copying, correcting, 255–258
fluorescent, 140, 233–237
improving dynamic range for poor conditions, 14–16
incandescent, 140, 159
for portraiture, 188
strong contrast in, 228
lighting (workspace), 4, 28, 29
location shoots. *See also* snapshots
aerial photography, 176–182, 183
photojournalism, 182–186
wildlife photography, 206
luminance noise, 222. *See also* noise
Luminosity blend mode
for brightness changes maintaining color balance, 24
for correction mask for copy lighting, 258
increasing contrast with, 104–105
for maintaining saturation in brightest colors, 224
in Mixed Mode Image Save, 210, 212

M

Macintosh computers
calibrating monitors, 31
color engines, 36–37
installing output profiles, 33–34
Macintosh Display Calibrator Assistant, 31
Magic Wand tool, 172
masks
Brush tool for adding to, 321
for correcting copy lighting, 255–258
edge, applying Unsharp Mask filter to, 130–134
edge, for sharpening aerial photography, 180–182
Hide Edges mask, 192–197
layer, 25, 291
Quick Mask mode for, 320–321
selection, for color-correction, 156–165
selection, for Lens Blur filter, 334
for softening facial skin, 182–188
Match Color options, 172
Maximum filter, sharpening using, 132
Median filter, sharpening using, 132
memory colors. *See also* flesh tones; skies
calibrating Camera Raw color, 76–83
as most recognizable content, 87
Merge to HDR command, 14–16, 26
metadata preferences (Adobe Bridge), 56–57
Microsoft ICM color engine, 37
midtones, 71, 121
Missing Profiles dialog box, 39–40
moiré patterns
correcting for copy work, 264–266
correcting in non-copy photos, 266
photocopying and, 262–263
viewing on monitor, 264
monitors
calibrating, 4, 16, 26, 30–32, 357–360
color, printed colors versus, 141
color profiles, 16
CRT versus LCD, 16–17, 30, 42
matching Kelvin rating of lighting to, 28
moiré patterns and, 264
soft-proofing on, 40–41, 354–364
viewing booth for, 28

motion blur, adding with Lens Blur filter, 333–336
Multiply blend mode, 13–14, 322

N

Nearest Neighbor resampling mode, 8
near-infrared (NIR), 297
negatives, copying
  black-and-white, 271–273
  color, 274–280
neutral tone, checking for, 160
noise
  Camera Raw versus JPEG and, 49
  checking after tonal adjustment, 209
  chromatic versus luminance, 222
  clipping to decrease, 219–220
  contrast enhancements and, 176
  Lens Blur filter option, 333
  Noise Reduction filter for, 222–224
  reducing overall, 222–224
  reducing with local control, 224–225
  sharpening and, 240
  underexposure and, 208, 209, 210
Normal blend mode, 210, 211

O

Ole No Moire file (Dry Creek Photo), 200
1-bit line art, printing, 366
online printing services, 372–374
onOne Software's Genuine Fractals Print Pro, 9, 182
Opacity settings, duplicating layers and, 210
Opteka slide-copying unit, 281
output profiles (for printing equipment)
  acquiring device profiles, 33
  assuming, 36, 39–40
  automatic profile selection for inkjets, 345–349, 354
  converting color to, 36–38
  custom, for inkjets, 352–354
  developer profiles, 19, 33, 42
  embedding in images, 36–38
  fine-art black-and-white conversion using, 292–296
  installing, on the Mac, 33–34
  installing, on Windows, 34
  overview, 18–19
  purchasing custom profiles, 34, 42
  soft-proofing with, 40–41
overexposure
  colorcasts from, 140, 150
  correcting colorcast problems, 150–155
  Threshold dialog box for analyzing, 150–151
  uneven, correcting, 228–233

P

paper
  color profiles for, 314, 370, 376
  scaling image to fit, 375
Paste Camera Raw Settings dialog box, 85
Perceptual color conversion, 37, 38
photo enlargers for copy stands, 251
Photo Filters
  adjustment layers for, 318, 319
  color correction and, 316–318
  combining, 324–327
  Curves dialog box versus, 316, 317, 338
  dialog box options, 318–319
  Hue/Saturation dialog box versus, 316, 338
  overview, 316
  toning and, 318–324
photo finishing labs, 370–371
Photo Flo, 252
photo restoration resources, 253
photocopying
  for art prints, 253–255
  for black-and-white negatives, 271–273
  Camera Raw calibrations for, 259–262
  for color negatives, 274–280
  copy lighting correction mask for, 255–258
  copyright issues, 262
  defined, 250
  makeshift copy stand for, 251
  moiré patterns and, 262–267
  overview, 250–251
  for photo prints, 252–253
  scanner versus camera for, 250, 268, 281
  slide duping, 267–271, 281
photojournalism
  dot gain issues for, 184–185
  fast pace of, 182–183
  press output for, 183–184
Photoshop Color Engine, printing using, 350–351, 354
Photoshop CS2. *See also specific techniques and tools*
  auto launching Bridge from, 75–76
  color and tonal correction tools, 22–25
  opening Camera Raw format in, 72–76
  Photoshop Elements versus, 11
Photoshop Elements, 11, 35
pigmented inks, 370
Pixelgenius Photokit Sharpener, 122
pixels
  device differences and, 4–5
  image sizes and, 6
playing Actions, 7–8
portraiture. *See also* flesh tones
  enhancing skin tones, 187–198
  flesh tone gradient picker for, 199–205
  glamour and, 186
  removing wrinkles, 188–191
  retouching shiny skin, 191–192
  softening facial skin, 192–198
  working with shy people, 188
postcard look, 220–221
Preferences dialog box (Adobe Bridge), 55–58
previewing. *See* soft-proofing

primary colors, 140–141
print copying
art prints, 253–255
copy lighting correction mask for, 255–258
photo prints, 252–253
Print dialog box, 346, 347–349
Print Preview dialog box, 346–347, 368–369
Print with Preview command, 345–346, 350, 353
printers and printing equipment
automatic profile selection for inkjets, 345–349, 354
bit depth and, 12
calibration systems for, 42
color mode and, 26
dedicated, for black-and-white printing, 365–366
determining image size for, 341–343
device resolution, 341–344
inkjet, 344–354, 375
maintenance, 375
Output Options for, 368–369
output profiles for, 18–19, 33–41, 42, 352–354
press output, 183–184, 366–367
Print dialog box settings, 347–349
resolution and pixels in images, 5
service providers for, 370–374
substrates for, 254
printing
assuming output profiles for, 36, 39–40
black-and-white photos, 364–366, 376
camera resolution and, 340–341
device resolution and, 341–344
file resolution and, 341
to inkjet printers, 344–354
inks for, 370, 376
magenta bias with Epson printers, 351–352
1-bit line art, 366
Output Options for, 368–369
paper for, 314, 370
press output, 183–184, 366–367
Print with Preview command for, 345–346, 350, 353
scaling image to fit paper, 375
service providers for, 370–374
soft-proofing (previewing) before, 40–41, 354–364
speed and, 344
product photography, 176
profiles. *See* color profiles

Q

QuadTone RIP (Raster Image Processor), 365
Quick Mask mode, 320–321

R

red-eye correction, 226–228
Reduce Noise dialog box, 222–224
Relative Colorimetric color conversion, 37, 38
resampling images
downsampling, 8–9, 241–243, 265
modes for, 8–9
resolution and, 8, 9
underexposed images, 210, 214, 218
upsampling, 9–10
resizing images
creating an Action for, 6–7
determining image size for printing, 341–343
downsampling, 8–9
upsizing, 9–10, 375
without affecting resolution, 6
resolution
of cameras, printing and, 340–341
downsampling images and, 8
for editing Camera Raw files, 60
format of camera images and, 6
of images, printing and, 341
optimum for printer, 342
of printing devices, 5, 341–344
resizing an image without affecting, 6
upsampling images and, 9
restoration, resources for, 253
RGB color mode
CMYK output and, 11
color mismatch options, 21–22
embedding output profiles in images, 36–38
offset press printing and, 367
overview, 10
printers and, 26
for printing black-and-white photos, 314
soft-proofing with output profiles, 40, 41
Rosco filters
Cinegel 3204 1/4 Tough Booster Blue, 280
Tough Plus Green #3304, 236–237

S

saturation
automating adjustments, 222
in Camera Raw dialog box, 71
fixing severely underexposed images and, 210, 212
flesh tones and, 166, 167
Hue/Saturation dialog box for correcting, 153–154
maintaining in brightest colors, 224
photocopying art prints and, 254
photos taken with insufficient flash and, 215–216, 217
for postcard look, 220–221
Saturation color conversion, 37, 38
Save As dialog box, embedding color profiles using, 20
Save Options dialog box, 53–55
saving files
embedding color profiles using Save As, 20
lossless compression formats for, 7
in TIFF format, 367
scanner versus camera for photocopying, 250, 268, 281

Screen blend mode
brightness adjustment using, 214, 322
in Mixed Mode Image Save, 210, 211
selecting. *See also* selection masks
adding/subtracting selections from channel masks, 335
Color Range command for, 155, 156–159, 172
eye for red-eye correction, 226
further information, 172
Magic Wand tool for, 172
Selective Color Options dialog box for, 162–164
selection masks
correcting color using, 159–165
creating with Color Range command, 157–159
for Lens Blur filter, 334
Selective Color Options dialog box, 162–164
self-serve photo centers, 371–372
sepia tone images
combining RGB color with, 308–313
creating, 306–308
service providers
online services, 372–374
photo finishing labs, 370–371
self-serve and discount centers, 371–372
Shadow/Highlight command
Amount sliders, 119, 232
bit depth and, 116
Black Clip/White Clip text boxes, 121, 232
Color Correction slider, 120–121
for flat overcast images, 238, 239
limitations of, 116, 117
Midtone Contrast slider, 121
Radius slider, 119–120, 232
shadow recovery feature, 214–215
Tonal Width slider, 119, 232
for uneven exposure correction, 230–232
uses for, 118
using, 118–121
shadows. *See* highlights and shadows
Sharpen Edges filter, 124
Sharpen filter, 124
Sharpen More filter, 124
sharpening. *See also* Unsharp Mask filter
aerial photography, 179–182
in Camera Raw dialog box, avoiding, 72, 87, 122
considerations for, 122–123
determining right amount of, 138
downsampling after, 241–243
edge-sharpening method for, 130–134
eliminating artifacts, 135–136
after Lens Blur filter use, 338
other filters for, 124
oversharpening, avoiding, 122, 123, 179
place in editing process, 244
snapshots, 239–243, 244
third-party plug-ins for, 122
Sheppard, Rob (*Adobe Camera Raw For Digital Photographers Only*), 46
sidecar XMP files, 58, 88
simulating an infrared shot, 298–301
16-bit images
converting 8-bit images to, 114–115, 137
digital camera not producing, 26
overview, 12
skies. *See also* memory colors
Color Range command for selecting, 155
overcast, 237–239
overexposure color correction for, 153, 154–155
reducing noise in, 224–225
shooting for later use, 324
skin tones. *See* flesh tones; memory colors
slide duping, 267–271, 281
snapshots
flash exposure problems, correcting, 208–217
fluorescent lighting problems, correcting, 233–237
noise, reducing, 222–225
overcast lighting and, 237–239
red-eye correction, 226–228
sharpening, 239–243, 244
underexposure problems, correcting, 217–221
uneven exposures, correcting, 228–233
Soft Light blend mode, 304–305
soft-proofing (previewing)
CMYK proofing, 40–41, 356
color crossover correction, 360–364
Customize Proof Condition options, 354–355
for out-of-gamut colors, 40
with output profiles, 40–41
RGB files, 40, 41
steps for, 355–356
viewing compensation layers, 357–360
Spiralux full-spectrum lamps, 28
sRGB color working profile, 18
Suite Color Settings dialog box, 19
Sun Stick lamps, 28

T

Threshold dialog box, exposure analysis using, 150–151, 229–230
TIFF format, saving files as, 367
tinting photographs, 308–313
tonal adjustments. *See also* brightness adjustments; contrast
analyzing an image for, 92–93, 105–107
basic curve shapes for, 107–113
for blown-out highlights and shadows, 245
brightness values, 93–96
in Camera Raw dialog box versus Photoshop, 92
checking for neutral tone, 160
checking noise after, 209
checking tonal information available, 213–214

continued

tonal adjustments *(continued)*
for JPEG images, 113–115
Photo Filters for, 319–324
for photos taken with insufficient flash, 213–217
setting white and black points, 97–99
Shadow/Highlight command for, 116–121
smooth transitions with Curves dialog box, 100–101
for uneven exposure, 230, 232
tonal banding, 49
transfer functions, 184, 185, 186
transparencies, copying (slide duping), 267–271, 281
Triten 50 full-spectrum tubes, 28
12-bit images, 12

U

underexposure
beyond-repair photos, working with, 208–212
colorcasts from, 140, 149, 244
correcting colorcast problems, 149–150, 151
from insufficient flash, 212–217
multiple duplicate layers technique for, 210–212
in snapshots, correcting, 217–221
in snapshots taken at dusk or indoors, 217–221
Unsharp Mask filter
for aerial photography, double pass of, 182
Amount slider, 124–126
applying to mask created from edge pixels, 130–134
formula for calculating Amount setting, 124
grain accentuated by, 129–130
image content and, 125
ISO speed and, 125, 126
moiré pattern correction using, 264–265
output sources and, 124, 138
Radius slider, 127
for snapshots, 240–241
Threshold slider, 127–129
upsampling images, 9–10, 375

V

Variations command, 145
viewing booth, building, 29
viewing compensation layers, 357–360
vignettes, correcting, 329

W

Web sites. *See* Internet resources
white and black points
for aerial photography, 177, 178
AutoLevels versus AutoContrast for setting, 178
for black-and-white negative photocopies, 272–273
in Camera Raw dialog box, 71
checking for neutral tone, 160
checking noise after tonal adjustment, 209
in Curves dialog box, 100
eyedropper for setting, 160–161, 162
for photos taken with insufficient flash, 216
remapping for 8-bit images, 113–114
setting with Auto Levels, 97–99
Shadow/Highlight command for adjusting, 121
white balance
in Camera Raw dialog box, 71
for color negative photocopies, 275–277, 278
colorcasts, 147–148, 244
Curves dialog box for correcting, 147–148
for duped slides, 270
indoor lighting and, 140
White, Margaret Bourke (photographer), 92
wildlife photography, camera movement and, 206
Windows computers
calibrating monitors, 31–32
color engines, 36–37
installing output profiles, 34
working-space profiles. *See* color working profiles

X

XMP sidecar files, 58, 88